

Title (en)

SIGNAL RECEIVER AND METHOD OF COMPENSATING FREQUENCY OFFSET

Title (de)

SIGNALEMPFÄNGER UND VERFAHREN ZUR KOMPENSATION DER FREQUENZABWEICHUNG

Title (fr)

RECEPTEUR DE SIGNAUX ET PROCEDE DE COMPENSATION DU DECALAGE DE FREQUENCE

Publication

**EP 1179901 A1 20020213 (EN)**

Application

**EP 00925676 A 20000515**

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- JP 24866699 A 19990902

Abstract (en)

An OFDM receiver includes an offset compensator (14) compensating for a frequency offset in a received OFDM signal. The offset compensator (14) includes a memory (51) storing two reference signals corresponding to arbitrary portions in the start symbol of the OFDM signal. A cross correlation value between the received OFDM signal and each of the two reference signals is calculated by a cross correlator (52, 53). Each peak position is detected by a peak detector (54). A frequency offset estimate value of the received OFDM signal is estimated by a frequency offset estimation circuit (55) based on the cross correlation value at each detected peak position. A phase rotation circuit (37) compensates for the frequency offset of the received OFDM signal based on the estimated frequency offset estimate value. <IMAGE>

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IPC 8 full level

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